SEARCH

```
=> d his l15

     (FILE 'HCAPLUS' ENTERED AT 08:44:18 ON 10 MAR 2009)
L15          18 S L11 OR L12 OR L14
                SAV TEMP L15 GAR899HCP/A

=> d que stat l15
L2            9 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  (203518-71-2/
                BI OR 2085-33-8/BI OR 286383-62-8/BI OR 50926-11-9/BI
                OR 555-31-7/BI OR 693794-98-8/BI OR 7429-90-5/BI OR
                7789-24-4/BI OR 835-64-3/BI)
L5           22 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  12500.71/RID

L6            2 SEA FILE=REGISTRY SPE=ON  ABB=ON  PLU=ON  L2 AND L5
L7           18 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L5
L8           11 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L6
L9           18 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L7 OR L8
L10     1524519 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  73/SC,SX
L11          17 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L9 AND L10
L12           1 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L9 NOT L11
L13             QUE  SPE=ON  ABB=ON  PLU=ON  ELECTROLUM!N? OR ORGANOLUM
                !N? OR (ELECTRO OR ORGANO OR ORG#)(2A)LUM!N? OR LIGHT?(
                2A)(EMIT? OR EMISSION?) OR EL OR E(W)L OR OLED OR L(W)E
                (W)D OR LED/IT
L14          17 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L9 AND L13
L15          18 SEA FILE=HCAPLUS SPE=ON  ABB=ON  PLU=ON  L11 OR L12 OR
                L14
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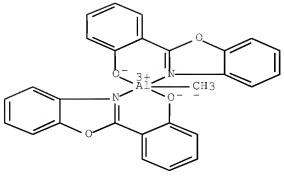
SEARCH RESULTS

=> d l15 1-18 ibib ed abs hitstr hitind

L15 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2007:594982 HCAPLUS Full-text
DOCUMENT NUMBER: 148:449720
TITLE: Ligand migration in the reaction of titanium complexes with AlMe3
AUTHOR(S): Kobylka, Michal J.; Jerzykiewicz, Lucjan B.; Patton, Jasson T.; Przybylak, Szymon; Utko, Jozef; Sobota, Piotr
CORPORATE SOURCE: Faculty of Chemistry, University of Wroclaw, Wroclaw, 50-383, Pol.
SOURCE: Collection of Czechoslovak Chemical Communications (2007), 72(4), 541-559
CODEN: CCCCAK; ISSN: 0010-0765
PUBLISHER: Institute of Organic Chemistry and Biochemistry, Academy of Sciences of the Czech Republic
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 148:449720
ED Entered STN: 01 Jun 2007
AB Five different titanium compds. cis-[Ti(η2-hbo)2(OEt)2]·0.5toluene (1), cis-[TiCl2(η2-thp)2] (2), [TiCl2(edbp)2] (3), [Ti2(μ-OMe)2(edbp)2(Me)2] (6), [Ti2(μ-OMe)2(edbp)2(OMe)2] (7) (Hhbo = 2-(2-hydroxyphenyl)benzoxazole, Hthp = tetrahydropyran-2-methanol, H2edbp = 2,2'-ethylidenebis(4,6-di-tert-butylphenol)), have been prepared and tested in combination with MAO as catalysts for propene polymerization and ethene and oct-1-ene copolymn. with the aim of gaining insight into the structure of the active species. Investigation of the 1/AlMe3 or 2/AlMe3 systems resulted in isolation of [Al(η2-hbo)2(Me)] (4) and [Al2(μ2-η2-thp)2(Me)4] (5) in high yields. This indicates that the trimethylaluminum contained in MAO abstrs. ligands from 1 or 2, affecting thus the catalytic performance of the 1,2/MAO catalysts. In contrast, compound 3 reacted with MAO affording methylated product 6. Accordingly, the 3/MAO catalyst differed from the above ones, furnishing at 70° e.g., narrow mol. weight polypropylene (Mn = 454 000; Mw/Mn = 2.49; Tm = 158.2°).
IT 1018829-98-5P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(crystal structure; preparation, structural characterization, and ligand migration in reaction of titanium complexes with trimethylaluminum)
RN 1018829-98-5 HCAPLUS
CN Aluminum, bis[2-(2-benzoxazolyl-κN3)phenolato-κO]methyl-, (TB-5-22)- (CA INDEX NAME)



CC 29-10 (Organometallic and Organometalloidal Compounds)
Section cross-reference(s): 35, 75, 78
IT 1018829-98-5P 1018829-99-6P 1018830-01-7P
1018830-02-8P 1018830-03-9P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(crystal structure; preparation, structural characterization, and ligand migration in reaction of titanium complexes with trimethylaluminum)
REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2006:1312471 HCAPLUS Full-text
DOCUMENT NUMBER: 146:74032
TITLE: Preparation of organic metal complex and organic electroluminescent device using said complex
INVENTOR(S): Yamamoto, Toshihiro; Kai, Takahiro; Komori, Masaki; Miyazaki, Hiroshi
PATENT ASSIGNEE(S): Nippon Steel Chemical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 27pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006132173	A1	20061214	WO 2006-JP311203	20060605

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR,

HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

CN 101193875	A	20080604	CN 2006-80020307	2007 1207
KR 2008021121	A	20080306	KR 2008-700400	2008 0107
US 20090026923	A1	20090129	US 2008-921001	2008 0122

PRIORITY APPLN. INFO.: JP 2005-166581 A 2005 0607

WO 2006-JP311203 W 2006 0605

OTHER SOURCE(S): MARPAT 146:74032

ED Entered STN: 15 Dec 2006

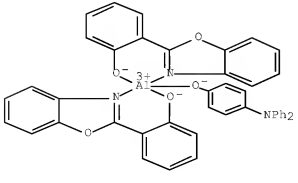
AB Claimed is an organic metal complex L2M-O-Ar1-N(Ar2)(Ar3) (Ar1 represents an optionally substituted aromatic hydrocarbon group or a heteroarom. group; Ar2 and Ar3 represent an optionally substituted aromatic hydrocarbon group or a heteroarom. group; M represents a trivalent metal; and L represents an (un)substituted arylate or heteroarylate ligand containing a heterocyclic moiety having at least one nitrogen atom coordinatable with M as a ring-constituting atom). This organic metal complex is suitable as a material which constitutes a ~~light-emitting~~ layer of an organic EL device together with a phosphorescent dopant. Thus, reacting aluminum triisopropoxide with 2-(2-hydroxyphenyl)benzoxazole and 4-diphenylaminophenol in toluene at 60°C gave an organic metal complex; an organic ~~electroluminescent~~ device containing said organic metal complex and tris(2-phenylpyridine) iridium complex showed high luminous efficiency.

IT 916851-16-6P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of organic metal complex and organic ~~electroluminescent~~ device using said complex)

RN 916851-16-6 HCAPLUS

CN Aluminum, bis[2-(2-benzoxazolyl-κN3)phenolato-κO][4-(diphenylamino)phenolato-κO]- (CA INDEX NAME)



CC 78-7 (Inorganic Chemicals and Reactions)
Section cross-reference(s): 73, 74
ST hydroxyphenylbenzoxazole diphenylaminophenol aluminum complex prepn electroluminescent device; org metal complex prepn electroluminescent device
IT Coordination compounds
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(organic; preparation of organic metal complex and organic electroluminescent device using said complex)
IT Dopants
(phosphorescent; preparation of organic metal complex and organic electroluminescent device containing said complex and phosphorescent dopant)
IT Electroluminescent devices
(preparation of organic metal complex and organic electroluminescent device using said complex)
IT 555-31-7, Aluminum triisopropoxide 835-64-3, 2-(2-Hydroxyphenyl)benzoxazole 25069-86-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of organic metal complex and organic electroluminescent device using said complex)
IT 916851-16-6P
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(preparation of organic metal complex and organic electroluminescent device using said complex)
IT 693794-98-8, Tris(2-phenylpyridine)iridium
RL: TEM (Technical or engineered material use); USES (Uses)
(preparation of organic metal complex and organic electroluminescent device using said complex)
REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2005:1027133 HCAPLUS Full-text
DOCUMENT NUMBER: 143:315242
TITLE: Organic electroluminescent device
INVENTOR(S): Fukumatsu, Takayuki; Miyazaki, Hiroshi
PATENT ASSIGNEE(S): Nippon Steel Chemical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 35 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005089025	A1	20050922	WO 2005-JP3764	2005 0304

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,

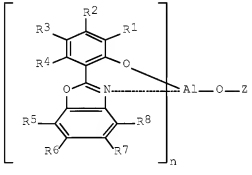
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL,
PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH,
CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT,
LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF,
CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

CN 1934907	A	20070321	CN 2005-80008340	2005 0304
KR 2006135024	A	20061228	KR 2006-721275	2006 1013
US 20070254182	A1	20071101	US 2007-590899	2007 0104

PRIORITY APPLN. INFO.:

JP 2004-72504	A	2004 0315
JP 2004-72505	A	2004 0315
WO 2005-JP3764	W	2005 0304

OTHER SOURCE(S): MARPAT 143:315242
ED Entered STN: 23 Sep 2005
GI



I

AB Disclosed is an organic electroluminescent device (organic EL device) which has a simple structure and utilizes phosphorescence. The organic electroluminescent device is improved in luminous efficiency and secured of sufficient driving stability. Such an organic electroluminescent device comprises a light-emitting layer or a plurality of organic compound thin film layers including a light-emitting layer formed between a pair of electrodes. The light-emitting layer contains a compound composed of an Al complex of an

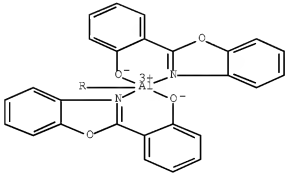
oxyphenylbenzoxazole which is represented by the general formula I as a host material, while containing an organic metal complex including Ru, Rh, Pd, Ag, Re, Os, Ir, Pt or Au as a guest material, where R1-R8 independently represent a hydrogen atom, an alkyl group, an aromatic group or the like; n represents 2 or 4; and Z represents an aromatic group, a triarylsilyl group or the like when n is 2, while representing Al(III) when n is 4.

IT 203518-71-2P 286383-62-8P
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(organic electroluminescent device)

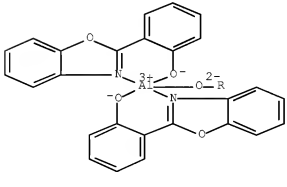
RN 203518-71-2 HCAPLUS

CN Aluminum, tetrakis[2-(2-benzoxazolyl-κN3)phenolato-κO]-μ-oxodi- (CA INDEX NAME)

PAGE 1-A

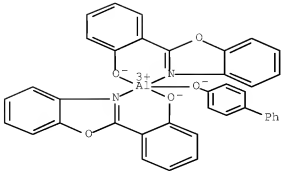


PAGE 2-A



RN 286383-62-8 HCAPLUS

CN Aluminum, bis[2-(2-benzoxazolyl-κN3)phenolato-κO][1,1'-biphenyl]-4-olato]- (9CI) (CA INDEX NAME)



IC ICM H05B033-14
ICS C07D263-56; C09K011-06
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 28, 74
ST org electroluminescent device metal oxaphenylbenzoxazole
IT Electroluminescent devices
(organic electroluminescent device)
IT 2085-33-8, Alq3 7429-90-5, Aluminum, uses 7789-24-4, Lithium fluoride, uses 50926-11-9, ITO 693794-98-8
RL: DEV (Device component use); USES (Uses)
(organic electroluminescent device)
IT 203518-71-2P 286383-62-8P
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(organic electroluminescent device)
IT 555-31-7, Aluminumtriisopropoxide 835-64-3, 2,-(2-Hydroxyphenyl)benzoxazole
RL: RCT (Reactant); RACT (Reactant or reagent)
(organic electroluminescent device)
REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:609758 HCAPLUS Full-text
DOCUMENT NUMBER: 139:171099
TITLE: Organic light-emitting devices employing phosphorescent material doped into the electron-transporting layer
INVENTOR(S): Yamazaki, Hiroko; Tokuda, Atsushi; Tsutsui, Tetsuo
PATENT ASSIGNEE(S): Semiconductor Energy Laboratory Co., Ltd., USA
SOURCE: U.S. Pat. Appl. Publ., 27 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20030146443	A1	20030807	US 2002-304410	

				2002 1126
US 6734457	B2	20040511		
JP 2003229275	A	20030815	JP 2002-341774	2002 1126
JP 3759925	B2	20060329		
US 20040124425	A1	20040701	US 2003-737569	2003 1216
US 7473575	B2	20090106		
JP 2005101002	A	20050414	JP 2004-360371	2004 1213
US 20080143254	A1	20080619	US 2007-976781	2007 1029
US 7482626	B2	20090127		
PRIORITY APPLN. INFO.:			JP 2001-360500 A	2001 1127
			JP 2002-341774 A3	2002 1126
			US 2002-304410 A1	2002 1126
			US 2003-737569 A1	2003 1216

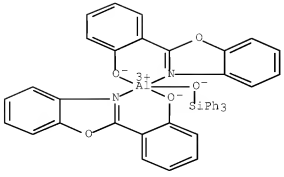
ED Entered STN: 08 Aug 2003

AB Light-emitting devices are described which comprise an anode, an optional hole-injection layer in contact with the anode, an organic compound film, an optional electron-injection layer in contact with a cathode, and a cathode, where the organic compound film comprises a hole-transporting layer containing a hole-transporting material; and an electron-transporting layer in contact with the hole-transporting layer and containing an electron-transporting material, where a light- emitting material capable of emitting light from a triplet excited state is added in the electron transporting layer.

IT 573968-22-6
RL: DEV (Device component use); USES (Uses)
(electron-transporting layer; organic light-emitting devices employing phosphorescent material doped in electron-transporting layer)

RN 573968-22-6 HCAPLUS

CN Aluminum, bis[2-(2-benzoxazolyl-κN3)phenolato-κO](triphenylsilanolato)- (9CI) (CA INDEX NAME)



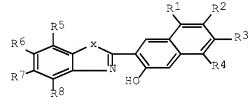
IC ICM H01L027-15
INCL 257080000
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 22, 76, 78
ST org electroluminescent device phosphorescent dopant
IT Phosphorescent substances
(organic light-emitting devices employing phosphorescent material doped in electron-transporting layer)
IT Electroluminescent devices
(organic, phosphorescent; organic light-emitting devices employing phosphorescent material doped in electron-transporting layer)
IT 192198-85-9 573968-21-5
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(doped electron-transporting and phosphorescent layer; organic light-emitting devices employing phosphorescent material doped in electron-transporting layer)
IT 2085-33-8, Tris(8-quinolinolato)aluminum 29190-60-1 47464-14-2 146162-54-1, Bis(2-methyl-8-quinolinolato)(4-phenylphenolato)aluminum 259228-55-2 573968-22-6 573968-23-7
RL: DEV (Device component use); USES (Uses)
(electron-transporting layer; organic light-emitting devices employing phosphorescent material doped in electron-transporting layer)
IT 157077-25-3 338949-42-1 500899-10-5
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(electron-transporting layer; organic light-emitting devices employing phosphorescent material doped in electron-transporting layer)
IT 134257-64-0 148044-07-9 163815-23-4 168091-66-5 573968-20-4
RL: DEV (Device component use); PRP (Properties); USES (Uses)
(hole-transporting layer; organic light-emitting devices employing phosphorescent material doped in electron-transporting layer)
IT 337526-85-9 376367-93-0
RL: DEV (Device component use); MOA (Modifier or additive use); PRP (Properties); USES (Uses)
(phosphorescent dopant; organic light-emitting devices employing phosphorescent material doped in electron-transporting layer)
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE

FOR THIS RECORD. ALL CITATIONS AVAILABLE
IN THE RE FORMAT

L15 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2003:214869 HCAPLUS Full-text
DOCUMENT NUMBER: 138:262448
TITLE: Electroluminescent devices with high luminance
INVENTOR(S): Enomoto, Kazuhiro
PATENT ASSIGNEE(S): Sharp Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003082341	A	20030319	JP 2001-272328	20010907
PRIORITY APPLN. INFO.:			JP 2001-272328	20010907

OTHER SOURCE(S): MARPAT 138:262448
ED Entered STN: 19 Mar 2003
GI



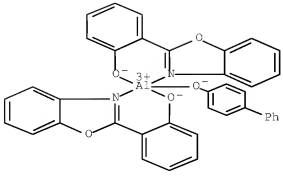
I

AB In the devices having ≥1 organic layers between anodes and cathodes, the organic layers comprise metal complexes having I ligands (X = O, S, NH; R1-R8 = lower alkyl or alkoxy, halo, H; adjacent R1-R8 may form aromatic ring). The metal complexes show high glass transition temperature, good film-forming and electron-transporting properties, and high thermal stability.

IT 286383-62-8
RL: DEV (Device component use); USES (Uses)
(light-emitting layers; high-luminance electroluminescent devices containing heat-resistant metal complexes)

RN 286383-62-8 HCAPLUS

CN Aluminum, bis[2-(2-benzoxazolyl-κN3)phenolato-κO][1,1'-biphenyl]-4-olato]- (9CI) (CA INDEX NAME)



IC ICM C09K011-06
ICS H05B033-14; H05B033-22
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
ST metal complex **electroluminescent** device luminance improvement; thermal stability metal complex **electroluminescent** device; benzoxazole complex **electroluminescent** device luminance improvement; benzimidazole complex **electroluminescent** device luminance improvement; benzothiazole complex **electroluminescent** device luminance improvement
IT Ligands
RL: DEV (Device component use); USES (Uses)
(complexes, light-emitting layers; high-luminance **electroluminescent** devices containing heat-resistant metal complexes)
IT **Electroluminescent** devices
(high-luminance **electroluminescent** devices containing heat-resistant metal complexes)
IT 56235-91-7, α-Naphthol lithium salt
RL: DEV (Device component use); USES (Uses)
(electron-barrier layers; high-luminance **electroluminescent** devices containing heat-resistant metal complexes)
IT 157759-29-0
RL: DEV (Device component use); USES (Uses)
(hole-transporting layers; high-luminance **electroluminescent** devices containing heat-resistant metal complexes)
IT 128904-10-9 286383-62-8 502634-83-5 502634-84-6
502634-85-7 502634-86-8 502634-87-9 502634-88-0
502634-89-1 502634-90-4 502634-91-5 502634-92-6
502634-93-7 502634-94-8 502634-95-9 502634-96-0
502634-97-1 502634-98-2 502689-07-8
RL: DEV (Device component use); USES (Uses)
(light-emitting layers; high-luminance **electroluminescent** devices containing heat-resistant metal complexes)

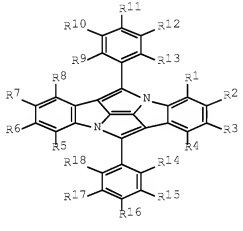
L15 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:686841 HCAPLUS Full-text
DOCUMENT NUMBER: 133:259119
TITLE: Organic **electroluminescent** component
INVENTOR(S): Takahashi, Takamitsu; Iizumi, Yasuhiro

PATENT ASSIGNEE(S): Futaba Denshi Kogyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000268962	A	20000929	JP 1999-73983	1999 0318

PRIORITY APPLN. INFO.: JP 1999-73983 1999 0318

OTHER SOURCE(S): MARPAT 133:259119
ED Entered STN: 29 Sep 2000
GI



I

AB The invention refers to an organic ~~electroluminescent~~ component I [R1-22 = H, halo, OH, mercapto, cyano, amino nitro, (un)substituted alkyl, alkoxy, alkylthio, N-mono-alkylamino, N, N-dialkylamino, aryl, aryloxy, arylthio, or heterocyclic ring].
IT 203518-71-2
RL: DEV (Device component use); USES (Uses)
(organic ~~electroluminescent~~ component)
RN 203518-71-2 HCAPLUS
CN Aluminum, tetrakis[2-(2-benzoxazolyl-κN3)phenolato-κO]-μ-oxodi- (CA INDEX NAME)

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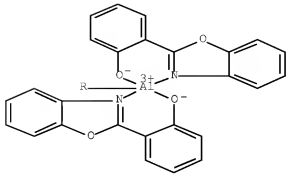
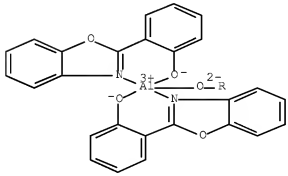


PAGE 2-A



IC ICM H05B033-14
ICS C09K011-06; H05B033-22
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
ST org electroluminescent material phosphor
IT Phosphors
(electroluminescent; organic electroluminescent component)
IT 147-14-8, Copper phthalocyanine 2085-33-8, Aluminum tris(8-hydroxyquinolinato) 7429-90-5, Aluminum, uses 7789-24-4, Lithium fluoride, uses 50926-11-9, ITO 123847-85-8 203518-71-2 294635-35-1 294635-36-2 294635-37-3
RL: DEV (Device component use); USES (Uses)
(organic electroluminescent component)

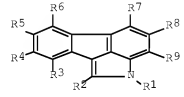
L15 ANSWER 7 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:686840 HCAPLUS Full-text
DOCUMENT NUMBER: 133:259118
TITLE: Organic electroluminescent component
INVENTOR(S): Takahashi, Hisamitsu; Iizumi, Yasuhiro
PATENT ASSIGNEE(S): Futaba Denshi Kogyo Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 28 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000268961	A	20000929	JP 1999-72176	19990317

PRIORITY APPLN. INFO.: JP 1999-72176 19990317

OTHER SOURCE(S): MARPAT 133:259118
ED Entered STN: 29 Sep 2000
GI



I

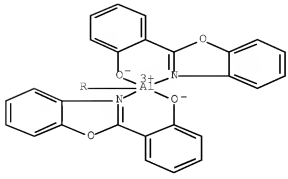
AB The invention refers to an organic electroluminescent component I [R1-9 = H, halo, OH, mercapto, cyano, amino nitro, (un)substituted alkyl, alkoxy, alkylthio, N-mono-alkylamino, N, N-dialkylamino, aryl, aryloxy, arylthio, or heterocyclic ring; and adjacent groups may join together to form (un)substituted aromatic or heterocyclic rings].

IT 203518-71-2
RL: DEV (Device component use); USES (Uses)
(organic electroluminescent component)

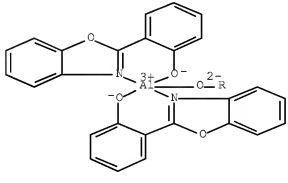
RN 203518-71-2 HCAPLUS

CN Aluminum, tetrakis[2-(2-benzoxazolyl-κN3)phenolato-κO]-μ-oxodi- (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



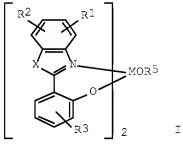
IC ICM H05B033-14
ICS C09K011-06; H05B033-22
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
ST org electroluminescent material phosphor
IT Phosphors
(electroluminescent; organic electroluminescent component)
IT 147-14-8, Copper phthalocyanine 2085-33-8, Aluminum tris(8-hydroxyquinolinato) 7429-90-5, Aluminum, uses 7789-24-4, Lithium fluoride, uses 50926-11-9, ITO 123847-85-8 203518-71-2 294638-61-2 294638-62-3 294638-63-4 294638-64-5 294638-65-6 294638-66-7 294638-67-8
RL: DEV (Device component use); USES (Uses)
(organic electroluminescent component)

L15 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:484424 HCAPLUS Full-text
DOCUMENT NUMBER: 133:142421
TITLE: Organic electroluminescent devices
INVENTOR(S): Ueda, Hideaki; Hisamitsu, Satoshi; Furukawa,

Keiichi
PATENT ASSIGNEE(S): Minolta Camera Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 35 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

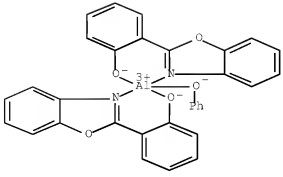
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000200684	A	20000718	JP 1999-44828	19990223
JP 4045683	B2	20080213		
PRIORITY APPLN. INFO.:			JP 1998-313046 A	19981104

OTHER SOURCE(S): MARPAT 133:142421
ED Entered STN: 18 Jul 2000
GI

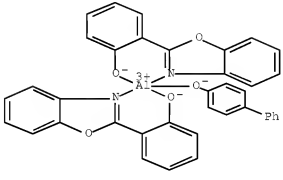


I

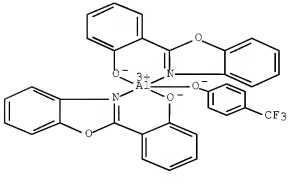
AB The devices comprise, as a phosphor and an electron transport material, I (R1,2 = H, alkyl, alkoxy, halo; R1,2 may form condensed ring with benzene ring associated with; R3 = H, alkyl, alkoxy, aryl; X = O, S, NR4; R4 = alkyl, aryl, H; R5 = (each substituted) alkylcarbonyl, arylcarbonyl, alkenylcarbonyl, 3-coumarinecarbonyl, 1,3-benzoxyzol-5-carbonyl, phenoxyphenyl, phenylthiophenyl, aryl, heterocyclic; M = Al, Ga).
IT 176045-96-8 286383-62-8 286383-63-9
286383-66-2
RL: DEV (Device component use); USES (Uses)
(organic electroluminescent devices containing aluminum and gallium complex compds.)
RN 176045-96-8 HCAPLUS
CN Aluminum, bis[2-(2-benzoxazolyl-κN3)phenolato-κO]phenoxy- (CA INDEX NAME)



RN 286383-62-8 HCAPLUS
CN Aluminum, bis[2-(2-benzoxazolyl-κN3)phenolato-κO][[1,1'-biphenyl]-4-olato]- (9CI) (CA INDEX NAME)



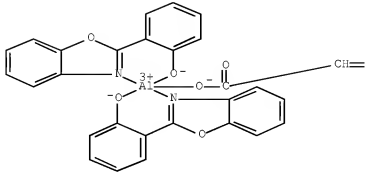
RN 286383-63-9 HCAPLUS
CN Aluminum, bis[2-(2-benzoxazolyl-κN3)phenolato-κO][4-(trifluoromethyl)phenolato-κO]- (CA INDEX NAME)



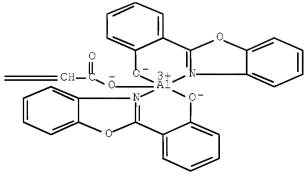
RN 286383-66-2 HCAPLUS
CN Aluminum, tetrakis[2-(2-benzoxazolyl-κN3)phenolato-

κO][μ-[2-butenedioato(2-)-κO1:κO4]]di- (9CI)
(CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM H05B033-14
ICS C09K011-06
CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
ST org electroluminescence aluminum gallium complex device
IT Electrodes
Electroluminescent devices
Glass substrates
Radiation
Surface
(organic electroluminescent devices containing aluminum and gallium complex compds.)
IT Coordination compounds
RL: DEV (Device component use); USES (Uses)
(organic electroluminescent devices containing aluminum and gallium complex compds.)
IT 50926-11-9, ITO 124729-98-2 176045-96-8

286383-62-8 286383-63-9 286383-64-0
286383-65-1 286383-66-2 286383-67-3 286383-68-4
286383-69-5 286383-70-8 286383-71-9 286383-72-0
286383-73-1 286383-74-2 286383-75-3 286383-76-4
286383-77-5 286383-78-6
RL: DEV (Device component use); USES (Uses)
(organic electroluminescent devices containing aluminum and gallium complex compds.)
IT 517-51-1, Rubrene
RL: MOA (Modifier or additive use); USES (Uses)
(organic electroluminescent devices containing aluminum and gallium complex compds.)

L15 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:452333 HCAPLUS Full-text
DOCUMENT NUMBER: 133:81414
TITLE: Organometallic complexes for use in light emitting devices
INVENTOR(S): Shi, Song Q.
PATENT ASSIGNEE(S): Motorola, Inc., USA
SOURCE: U.S., 16 pp., Cont.-in-part of U.S. Ser. No. 304,451.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

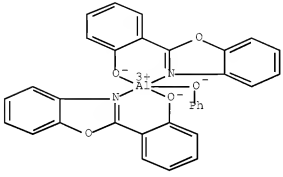
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6083634	A	20000704	US 1997-886553	19970811
JP 08081472	A	19960326	JP 1995-256962	19950908
JP 2937827	B2	19990823		
PRIORITY APPLN. INFO.:			US 1994-304451 A2	19940912

OTHER SOURCE(S): MARPAT 133:81414
ED Entered STN: 05 Jul 2000
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT
*

AB Organic light-emitting devices are described which comprise a layer of organometallic emissive material described by the general formulas I or II (M2 = divalent metal; M3 = trivalent metal; X = S, NH, or CH2; R1-8 and L1-5 = H or hydrocarbon groups or functional groups selected from cyano, halogen, haloalkyl, haloalkoxy, alkoxyl, amido, amino, sulfonyl, carbonyl, carbonyloxy and oxycarbonyl). Methods of fabricating the devices entailing the deposition of the emissive materials are also described. Examples in which X = O are also presented.

IT 176045-96-8P
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); USES (Uses)
(light-emitting devices using organometallic complexes and their fabrication)
RN 176045-96-8 HCAPLUS
CN Aluminum, bis[2-(2-benzoxazolyl-κN3)phenolato-κO]phenoxy- (CA INDEX NAME)



IC ICM H05B033-14
INCL 428690000
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 76, 78
ST organometallic complex light emitting device; oxyphenylbenzimidazole complex light emitting device; oxyphenylindole complex light emitting device; oxyphenylbenzothiazole complex light emitting device
IT Electroluminescent devices
Electroluminescent devices
Semiconductor device fabrication
(light-emitting devices using organometallic complexes and their fabrication)
IT 7429-90-5D, Aluminum, organometallic compds., uses 7439-95-4D, Magnesium, organometallic compds., uses 7440-41-7D, Beryllium, organometallic compds., uses 7440-55-3D, Gallium, organometallic compds., uses 7440-66-6D, Zinc, organometallic compds., uses 7440-74-6D, Indium, organometallic compds., uses 23467-27-8
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); PROC (Process); USES (Uses)
(light-emitting devices using organometallic complexes and their fabrication)
IT 128904-10-9P 176045-96-8P
RL: DEV (Device component use); PEP (Physical, engineering or chemical process); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); USES (Uses)
(light-emitting devices using organometallic complexes and their fabrication)
IT 108-95-2, Phenol, reactions 835-64-3, 2-(2-Hydroxyphenyl) benzoxazole 7446-70-0, Aluminum chloride, reactions 13510-49-1, Beryllium sulfate

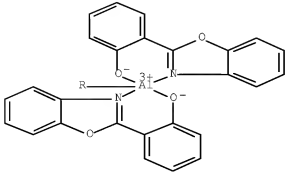
RL: RCT (Reactant); RACT (Reactant or reagent)
(light-emitting devices using
organometallic complexes and their fabrication)
REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L15 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:418166 HCAPLUS Full-text
DOCUMENT NUMBER: 133:50911
TITLE: Organic EL devices
INVENTOR(S): Takahashi, Takamitsu; Iizumi, Yasuhiro
PATENT ASSIGNEE(S): Futaba Denshi Kogyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

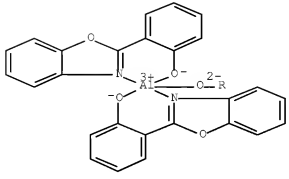
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000173777	A	20000623	JP 1998-350027	1998 1209
JP 3952616	B2	20070801		
PRIORITY APPLN. INFO.:			JP 1998-350027	1998 1209

ED Entered STN: 23 Jun 2000
AB The devices comprise: (1) a glass substrate; (2) an ITO anode (ionization potential I = I1); (3) a hole-blocking layer (I = I2 = I1 + 0.6 eV) comprising Al2O(OXZ)4 for blocking a hole transport from (2); (4) a hole transport layer having a 1st and a 2nd area contacting with and without (3), resp.; (5) an electron-transport phosphor layer; and (6) a cathode layer.
IT 203518-71-2
RL: DEV (Device component use); USES (Uses)
(organic EL devices)
RN 203518-71-2 HCAPLUS
CN Aluminum, tetrakis[2-(2-benzoxazolyl-κN3)phenolato-κO]-μ-oxodi- (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



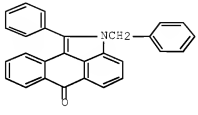
IC ICM H05B033-22
ICS C09K011-06; H05B033-14
CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
ST org electroluminescent ITO hole blocking layer
IT Anodes
Cathodes
Electroluminescent devices
Electron transport
Glass substrates
Hole (electron)
Hole transport
Ionization potential
(organic EL devices)
IT 147-14-8, Copper phthalocyanine 2085-33-8, Tris(8-quinolinolato)aluminum 50926-11-9, ITO 123847-85-8, [1,1'-Biphenyl]-4,4'-diamine, N,N'-di-1-naphthalenyl-N,N'-diphenyl- 203518-71-2
RL: DEV (Device component use); USES (Uses)
(organic EL devices)

L15 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:198223 HCAPLUS Full-text
DOCUMENT NUMBER: 132:229324
TITLE: Organic electroluminescent component
INVENTOR(S): Takahashi, Naomitsu; Miyauchi, Kazuo; Tsuruoka, Masahisa
PATENT ASSIGNEE(S): Futaba Denshi Kogyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 2000087026	A	20000328	JP 1998-261528	1998 0916
PRIORITY APPLN. INFO.:			JP 1998-261528	1998 0916

ED Entered STN: 28 Mar 2000
GI



I

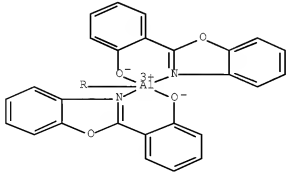
AB The invention refers to an organic electroluminescent component comprised of I.

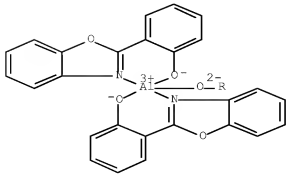
IT 203518-71-2
RL: DEV (Device component use); USES (Uses)
(organic electroluminescence device)

RN 203518-71-2 HCAPLUS

CN Aluminum, tetrakis[2-(2-benzoxazolyl-κN3)phenolato-κO]-μ-oxodi- (CA INDEX NAME)

PAGE 1-A





IC ICM C09K011-06
ICS H05B033-14
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
ST org electroluminescent device
IT Electroluminescent devices
(organic electroluminescence device)
IT 67-68-5, DMSO, uses 82-45-1, 1-Aminoanthraquinone 124-41-4, Sodium methoxide 1310-58-3, Potassium hydroxide, uses 2085-33-8, Aluminum tris(8-hydroxyquinolinato) 7429-90-5, Aluminum, uses 7439-93-2, Lithium, uses 50926-11-9, Indium tin oxide 52905-45-0, Benziloyl chloride 80772-75-4 123847-85-8 124729-98-2 203518-71-2
RL: DEV (Device component use); USES (Uses)
(organic electroluminescence device)

L15 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 2000:123228 HCAPLUS Full-text
DOCUMENT NUMBER: 132:173455
TITLE: Full color optical printer head made of organic electroluminescent device
INVENTOR(S): Tsuruoka, Sigehisa; Fukuda, Tatsuo; Shimizu, Yukihiko; Kobori, Yoichi
PATENT ASSIGNEE(S): Futaba Denshi Kogyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 12 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000052591	A	20000222	JP 1998-227218	19980811
PRIORITY APPLN. INFO.:			JP 1998-227218	19980811

ED Entered STN: 23 Feb 2000

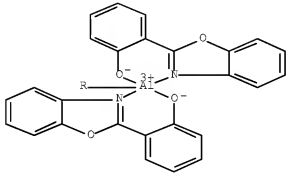
AB The full color optical printer head made of an organic electroluminescent device forms an image with lights from the organic electroluminescent device, wherein the organic electroluminescent device has emission in 450-650 nm range. The printer head is small and light and requires a little power consumption and provides the stable operation.

IT 203518-71-2
RL: TEM (Technical or engineered material use); USES (Uses)
(organic electroluminescent device of full color optical printer head)

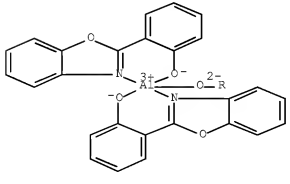
RN 203518-71-2 HCAPLUS

CN Aluminum, tetrakis[2-(2-benzoxazolyl-κN3)phenolato-κO]-μ-oxodi- (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



IC ICM B41J002-44
ICS B41J002-45; B41J002-455; C09K011-06; H01L033-00; H04N001-036; H05B033-12; H05B033-14

CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
Section cross-reference(s): 73

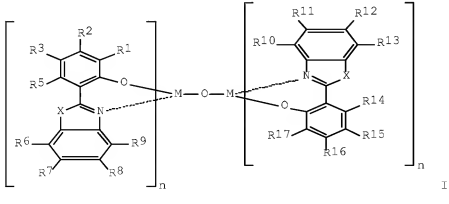
ST optical printer head electroluminescent device

IT Electroluminescent devices
Optical imaging devices
Recording apparatus
(full color optical printer head made of organic electroluminescent device)
IT 517-51-1 2085-33-8 6543-20-0 25067-59-8 58280-31-2
65181-78-4 163226-12-8 203518-71-2 258849-77-3
RL: TEM (Technical or engineered material use); USES (Uses)
(organic electroluminescent device of full color optical printer head)

L15 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:724331 HCAPLUS Full-text
DOCUMENT NUMBER: 130:45102
TITLE: Organic electroluminescent materials and organic electroluminescent devices using them
INVENTOR(S): Tamano, Michiko; Onikubo, Shunichi; Okutsu, Satoshi; Enokida, Toshio
PATENT ASSIGNEE(S): Toyo Ink Mfg. Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10298545	A	19981110	JP 1997-112087	19970430
JP 3832018	B2	20061011		
PRIORITY APPLN. INFO.:			JP 1997-112087	19970430

OTHER SOURCE(S): MARPAT 130:45102
ED Entered STN: 16 Nov 1998
GI



I

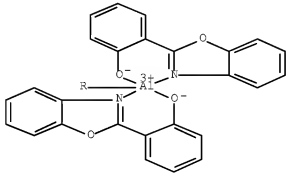
AB The material has a formula I (X = S, O, CH2; R1-17 = H, halogen, cyano, alkyl, alkoxy, aryl, aryloxy, NH2, heterocyclic; R1-17 may bond to form a ring; M = divalent or trivalent metal atom; n = 1, 2). The device shows high luminance and excellent stability in repeated use.

IT 203518-71-2 216884-53-6 216884-58-1
216884-61-6
RL: DEV (Device component use); USES (Uses)
(organic electroluminescent devices containing metal chelate complexes)

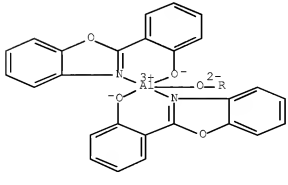
RN 203518-71-2 HCAPLUS

CN Aluminum, tetrakis[2-(2-benzoxazolyl-κN3)phenolato-κO]-μ-oxodi- (CA INDEX NAME)

PAGE 1-A



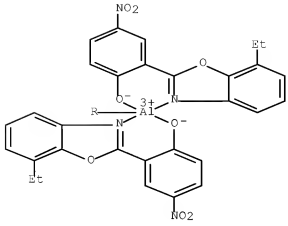
PAGE 2-A



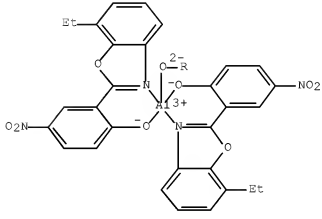
RN 216884-53-6 HCAPLUS

CN Aluminum, tetrakis[2-(7-ethyl-2-benzoxazolyl-κN3)-4-nitrophenolato-κO]-μ-oxodi- (9CI) (CA INDEX NAME)

PAGE 1-A

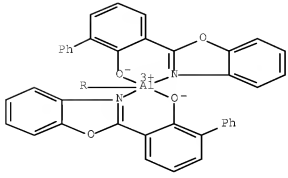


PAGE 2-A

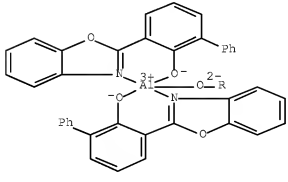


RN 216884-58-1 HCAPLUS
CN Aluminum, tetrakis[3-(2-benzoxazolyl-κN3)[1,1'-biphenyl]-2-olato-κO]-μ-oxodi- (CA INDEX NAME)

PAGE 1-A

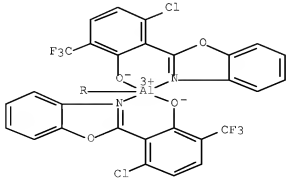


PAGE 2-A

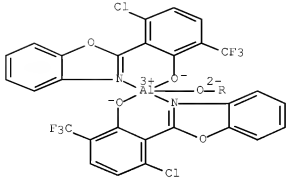


RN 216884-61-6 HCAPLUS
CN Aluminum, tetrakis[2-(2-benzoxazolyl-κN3)-3-chloro-6-(trifluoromethyl)phenolato-κO]-μ-oxodi- (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



IC ICM C09K011-06
ICS H05B033-14; H05B033-22
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 78
ST **electroluminescent** device metal chelate arom complex
IT Phosphors
(**electroluminescent**; organic **electroluminescent** devices containing metal chelate complexes)
IT **Electroluminescent** devices
(organic **electroluminescent** devices containing metal chelate complexes)
IT Chelates
RL: DEV (Device component use); USES (Uses)
(organic **electroluminescent** devices containing metal chelate complexes)
IT 203518-71-2 216884-51-4 216884-52-5
216884-53-6 216884-54-7 216884-55-8 216884-56-9
216884-57-0 216884-58-1 216884-59-2 216884-60-5
216884-61-6 216884-62-7 216884-63-8 216884-64-9
216967-42-9 216968-58-0 216969-43-6 216969-65-2
RL: DEV (Device component use); USES (Uses)
(organic **electroluminescent** devices containing metal chelate complexes)

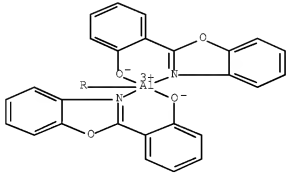
L15 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:586480 HCAPLUS Full-text
DOCUMENT NUMBER: 129:223058
ORIGINAL REFERENCE NO.: 129:45216a
TITLE: Organic **electroluminescent** device with multicolor emission
INVENTOR(S): Takahashi, Hisamitsu; Tsuruoka, Masahisa; Tanaka, Akira; Miyauchi, Kazuo
PATENT ASSIGNEE(S): Futaba Denshi Kogyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent

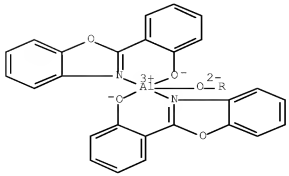
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10237439	A	19980908	JP 1997-37781	19970221
JP 3744103	B2	20060208		
PRIORITY APPLN. INFO.:			JP 1997-37781	19970221

ED Entered STN: 15 Sep 1998
AB The device has a pair of electrodes sandwiching a laminate comprising (A) an electron-transporting layer, (B) an organic light-emitting layer containing an Al complex having a benzoxazol backbone-containing ligand, (C) and a pos.-hole transporting layer. The device has multicolor emission.
IT 203518-71-2
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(organic electroluminescent device containing Al complex having benzoxazol backbone-containing ligand with multicolor emission)
RN 203518-71-2 HCAPLUS
CN Aluminum, tetrakis[2-(2-benzoxazolyl-κN3)phenolato-κO]-μ-oxodi- (CA INDEX NAME)

PAGE 1-A





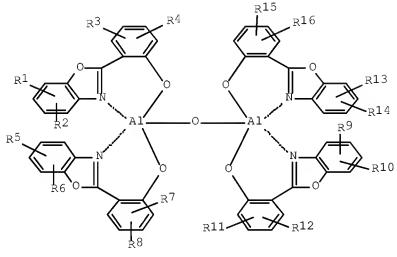
IC ICM C09K011-06
CC 73-12 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
ST **electroluminescent** device aluminum complex benzoxazol ligand; multicolor emission **electroluminescent** device benzoxal
IT **Electroluminescent** devices
(organic **electroluminescent** device containing Al complex having benzoxazol backbone-containing ligand with multicolor emission)
IT 806-71-3, Tetraphenyl butadiene 6543-20-0, Tri(biphenyl-4-yl)amine
RL: MOA (Modifier or additive use); USES (Uses)
(dopant; organic **electroluminescent** device containing Al complex having benzoxazol backbone-containing ligand with multicolor emission)
IT 203518-71-2
RL: DEV (Device component use); MOA (Modifier or additive use); USES (Uses)
(organic **electroluminescent** device containing Al complex having benzoxazol backbone-containing ligand with multicolor emission)

L15 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1998:71651 HCAPLUS Full-text
DOCUMENT NUMBER: 128:198541
ORIGINAL REFERENCE NO.: 128:39121a,39124a
TITLE: Organic **electroluminescent** material with high blue emission and device using it
INVENTOR(S): Takahashi, Naomitsu; Tsuoka, Nobuhisa; Tanaka, Tetsu; Miyauchi, Kazuo
PATENT ASSIGNEE(S): Futaba Denshi Kogyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

JP 10025472	A	19980127	JP 1996-183610	1996 0712
JP 3752734	B2	20060308		
US 6048631	A	20000411	US 1997-893757	1997 0711
PRIORITY APPLN. INFO.:			JP 1996-183610	A 1996 0712

OTHER SOURCE(S): MARPAT 128:198541
ED Entered STN: 06 Feb 1998
GI



I

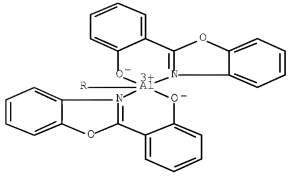
AB The title material is an Al complex with a ligand having 2-(2-hydroxyphenyl)benzoxazole structure I (R1-16 = H, substituent). The electroluminescent device has an organic light-emitting layer containing I sandwiched between an electron-transporting layer and a hole-transporting layer. The material shows good heat resistance and high-purity blue emission and the device shows storage stability.

IT 203518-71-2P 203518-72-3P 203518-73-4P
203518-74-5P 203518-75-6P 203518-76-7P
203518-77-8P 203518-78-9P 203518-79-0P
203518-80-3P
RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(aluminum complex organic electroluminescent material with high blue emission)

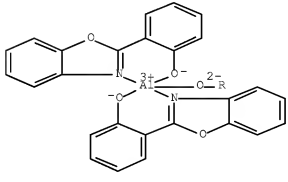
RN 203518-71-2 HCAPLUS

CN Aluminum, tetrakis[2-(2-benzoxazolyl-κN3)phenolato-κO]-μ-oxodi- (CA INDEX NAME)

PAGE 1-A

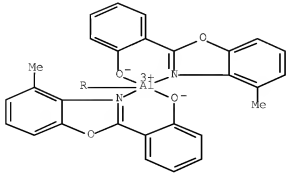


PAGE 2-A



RN 203518-72-3 HCAPLUS
CN Aluminum, tetrakis[2-(4-methyl-2-benzoxazolyl-κN3)phenolato-κO]-μ-oxodi- (9CI) (CA INDEX NAME)

PAGE 1-A



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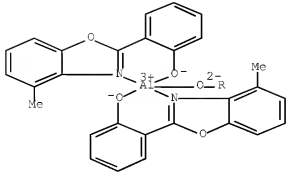
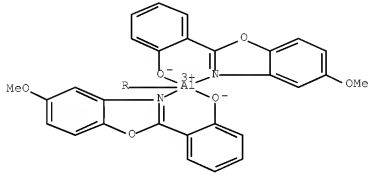


RN 203518-73-4 HCAPLUS
CN Aluminum, tetrakis[2-(5-methoxy-2-benzoxazolyl-κN3)phenolato-κO]-μ-oxodi- (9CI) (CA INDEX NAME)

PAGE 1-A



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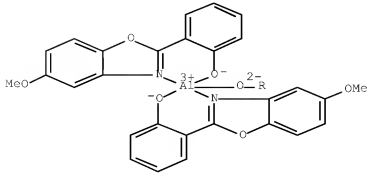
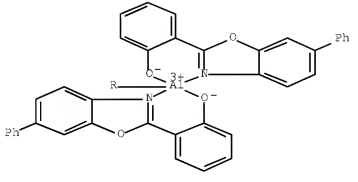


RN 203518-74-5 HCAPLUS
CN Aluminum, μ-oxotetrakis[2-(6-phenyl-2-benzoxazolyl-κN3)phenolato-κO]di- (9CI) (CA INDEX NAME)

PAGE 1-A



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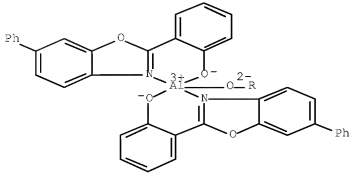
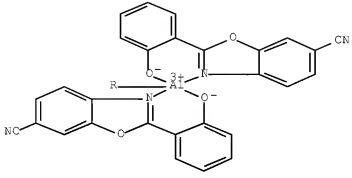


RN 203518-75-6 HCAPLUS
CN Aluminum, tetrakis[2-[2-(hydroxy-κO)phenyl]-6-benzoxazolecarbonitrilato-κN3]-μ-oxodi- (CA INDEX NAME)

PAGE 1-A



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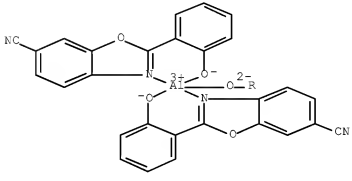
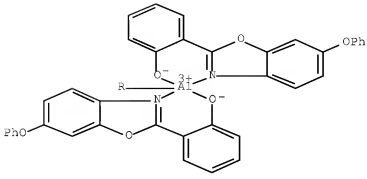


RN 203518-76-7 HCAPLUS
CN Aluminum, μ-oxotetrakis[2-(6-phenoxy-2-benzoxazolyl-κN3)phenolato-κO]di- (9CI) (CA INDEX NAME)

PAGE 1-A



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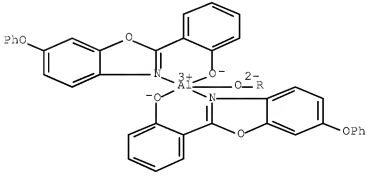
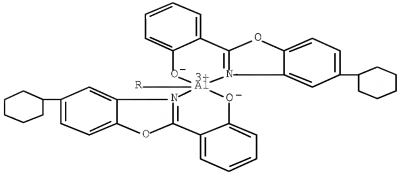


RN 203518-77-8 HCAPLUS
CN Aluminum, tetrakis[2-(5-cyclohexyl-2-benzoxazolyl-κN3)phenolato-κO]-μ-oxodi- (9CI) (CA INDEX NAME)

PAGE 1-A



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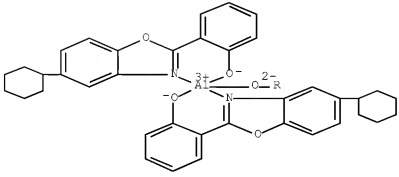
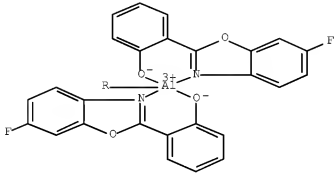


RN 203518-78-9 HCAPLUS
CN Aluminum, tetrakis[2-(6-fluoro-2-benzoxazolyl-κN3)phenolato-κO]-μ-oxodi- (9CI) (CA INDEX NAME)

PAGE 1-A



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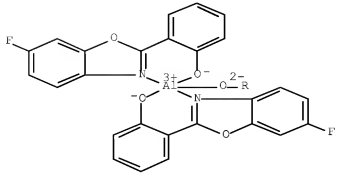
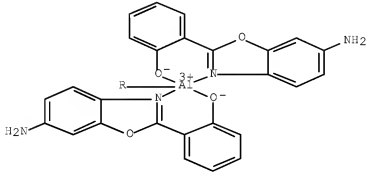


RN 203518-79-0 HCAPLUS
CN Aluminum, tetrakis[2-(6-amino-2-benzoxazolyl-κN3)phenolato-κO]-μ-oxodi- (9CI) (CA INDEX NAME)

PAGE 1-A



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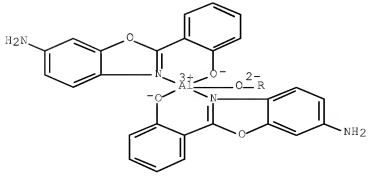
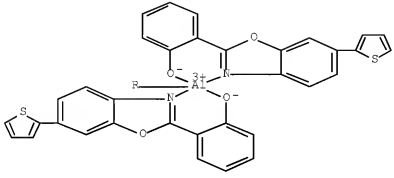


RN 203518-80-3 HCAPLUS
CN Aluminum, μ-oxotetrakis[2-[6-(2-thienyl)-2-benzoxazolyl-κN3]phenolato-κO]di- (9CI) (CA INDEX NAME)

PAGE 1-A



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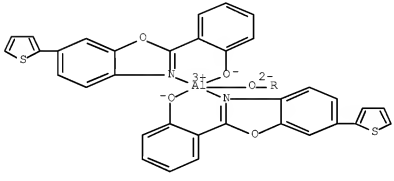

IC ICM C09K011-06
ICS H05B033-14
CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 28
ST aluminum complex hydroxyphenyl benzoxazole blue phosphor; electroluminescent device blue emission heat resistance
IT Electroluminescent devices
Phosphors
(aluminum complex organic electroluminescent material with high blue emission)
IT 203518-71-2P 203518-72-3P 203518-73-4P
203518-74-5P 203518-75-6P 203518-76-7P
203518-77-8P 203518-78-9P 203518-79-0P

203518-80-3P
RL: DEV (Device component use); IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(aluminum complex organic electroluminescent material with high blue emission)

IT 835-64-3, 2-(2-Hydroxyphenyl)benzoxazole 98792-64-4, 2-(2-Hydroxyphenyl)-6-aminobenzoxazole 154674-44-9 203518-81-4, 2-(2-Hydroxyphenyl)-4-methylbenzoxazole 203518-82-5, 2-(2-Hydroxyphenyl)-5-methoxybenzoxazole 203518-83-6, 2-(2-Hydroxyphenyl)-6-phenylbenzoxazole 203518-84-7, 2-(2-Hydroxyphenyl)-6-cyanobenzoxazole 203518-85-8, 2-(2-Hydroxyphenyl)-6-phenoxybenzoxazole 203518-86-9, 2-(2-Hydroxyphenyl)-5-cyclohexylbenzoxazole 203518-87-0, 2-(2-Hydroxyphenyl)-6-fluorobenzoxazole 203518-90-5, 2-(2-Hydroxyphenyl)-6-(2-thienyl)benzoxazole
RL: RCT (Reactant); RACT (Reactant or reagent)
(aluminum complex organic electroluminescent material with high blue emission)

L15 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1997:129550 HCAPLUS Full-text
DOCUMENT NUMBER: 126:137448
ORIGINAL REFERENCE NO.: 126:26447a,26450a
TITLE: Optical instrument containing aluminum complex showing high electron transporting property
INVENTOR(S): Kishii, Noryuki; Andoryuu, Hadoson
PATENT ASSIGNEE(S): Sony Corp., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08315982	A	19961129	JP 1995-138618	1995 0512
JP 3599131	B2	20041208		
PRIORITY APPLN. INFO.:			JP 1995-138618	1995 0512

OTHER SOURCE(S): MARPAT 126:137448
ED Entered STN: 26 Feb 1997
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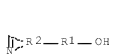

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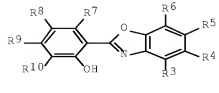


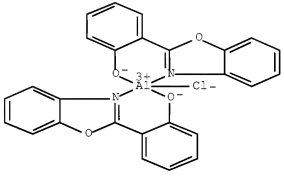
II

AB The instrument includes an emitting layer and/or an electron-transporting layer containing Al(L-O)2X [L = a ligand preferably OH- and aromatic N-containing compound derived from I [R1, R2 = atomic groups or substituents]; X = an anion preferably halo, alkoxy, phenoxy]. The ligand L may be o-hydroxyphenylbenzoxazole derivative II [R3-10 = H, halo, OH, NO2, carboxy, carbonyl, amino, amide, sulfonyl, or alkyl, aryl, or heterocycle (un)substituted with above groups]. The instrument shows plural color tones according to applied elec. voltage.

IT 186407-79-4P
RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)
(optical instrument containing aluminum complex showing high electron transporting property)

RN 186407-79-4 HCAPLUS

CN Aluminum, bis[2-(2-benzoxazolyl-κN3)phenolato-κO]chloro- (CA INDEX NAME)



IC ICM H05B033-14

CC 73-11 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 29

ST electroluminescent device aluminum complex electron transporting; optical instrument aluminum benzoxazole complex

IT Electroluminescent devices
(optical instrument containing aluminum complex showing high electron transporting property)

IT 148-24-3, 8-Quinolinol, reactions 835-64-3, 2-(o-Hydroxyphenyl)benzoxazole 7446-70-0, Aluminum chloride, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(in preparation of electron-transporting aluminum complex for electroluminescent device)

IT 186407-79-4P
RL: DEV (Device component use); PNU (Preparation, unclassified); PREP (Preparation); USES (Uses)
(optical instrument containing aluminum complex showing high electron transporting property)

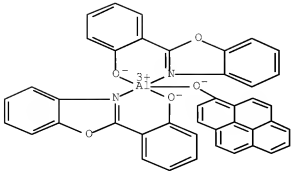
L15 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1996:621270 HCAPLUS Full-text
DOCUMENT NUMBER: 125:260738
ORIGINAL REFERENCE NO.: 125:48443a,48446a

TITLE: Organometallic complexes with built-in fluorescent dyes for use in light emitting devices
INVENTOR(S): Shi, Song Q.
PATENT ASSIGNEE(S): Motorola, Inc., USA
SOURCE: Eur. Pat. Appl., 22 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 726304	A2	19960814	EP 1996-102076	1996 0213
EP 726304 R: DE, FR, GB	A3	19970326		
US 5552547	A	19960903	US 1995-387691	1995 0213
JP 09095620	A	19970408	JP 1996-61582	1996 0213
JP 4049832	B2	20080220		
TW 401453	B	20000811	TW 1996-85101799	1996 0213

PRIORITY APPLN. INFO.: US 1995-387691 A 1995 0213

OTHER SOURCE(S): MARPAT 125:260738
ED Entered STN: 19 Oct 1996
AB Organometallic complexes with attached fluorescent dye groups are described by the general formula L1(L2)M-O-L3 (M = a trivalent metal ion; L1 and L2 are ligands that form a complex with M; and L3 is a fluorescent dye group). Preparation of the complexes entails reacting a mixture of L1, L2, and L3OH with MX3 (X = an anionic group, including halide, sulfate, or nitrate groups) in the presence of base. Electroluminescent devices employing the complexes are also described; the complexes may be introduced into an organic electroluminescent device by thoroughly pre-mixing them with a host organometallic emitter in a certain ratio and co-depositing it from a single source. The organometallic complex with fluorescent dye groups dets. the emission color.
IT 182135-27-9P
RL: DEV (Device component use); IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(organometallic complexes with attached fluorescent dye-groups and their preparation and light-emitting devices using them)
RN 182135-27-9 HCAPLUS
CN Aluminum, bis[2-(2-benzoxazolyl)phenolato-N2,O1](1-pyrenolato)-(9CI) (CA INDEX NAME)



IC ICM C09K011-06
ICS H05B033-14
CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 29, 76
ST fluorescent organometallic complex electroluminescent device
IT Electroluminescent devices
Fluorescent substances
(organometallic complexes with attached fluorescent dye-groups and their preparation and light-emitting devices using them)
IT 182135-21-3P 182135-24-6P 182135-27-9P
RL: DEV (Device component use); IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(organometallic complexes with attached fluorescent dye-groups and their preparation and light-emitting devices using them)
IT 961-80-8, 2-Naphthacenol 3682-83-5 6528-53-6, 1,3,6,8-Pyrenetetrasulfonic acid 23986-10-9 56892-30-9, Benzo[a]pyren-2-ol 58851-99-3 63019-38-5, 1-Chrysenol 78751-58-3, 2-Hydroxypyrene 112553-55-6, 2-Perylenol 112553-56-7, 3-Perylenol 115123-32-5, 2-Pentacenol 182135-56-4 182135-61-1 182135-67-7 182135-70-2 182135-73-5
RL: NUU (Other use, unclassified); USES (Uses)
(organometallic complexes with attached fluorescent dye-groups and their preparation and light-emitting devices using them)
IT 90-33-5, 7-Hydroxy-4-methylcoumarin 555-31-7, Aluminum isopropoxide 826-81-3, 8-Hydroxyquinaldine 835-64-3, 2-(2-Hydroxyphenyl)benzoxazole 5315-79-7, 1-Hydroxypyrene 7446-70-0, Aluminum trichloride, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(organometallic complexes with attached fluorescent dye-groups and their preparation and light-emitting devices using them)

L15 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2009 ACS on STN
ACCESSION NUMBER: 1996:268102 HCAPLUS Full-text
DOCUMENT NUMBER: 124:301973
ORIGINAL REFERENCE NO.: 124:55723a,55726a
TITLE: New organometallic complexes for use in light emitting devices
INVENTOR(S): Shi, Song Q.

PATENT ASSIGNEE(S): Motorola, Inc., USA
SOURCE: Eur. Pat. Appl., 19 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 700917	A2	19960313	EP 1995-114039	19950907
EP 700917	A3	19990317		
EP 700917	B1	20020508		
R: DE, GB				
JP 08081472	A	19960326	JP 1995-256962	19950908
JP 2937827	B2	19990823		
PRIORITY APPLN. INFO.:			US 1994-304451 A	19940912

ED Entered STN: 08 May 1996
GI

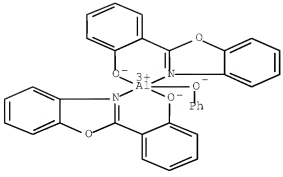
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Organometallic complexes for use in ~~electroluminescent~~ (~~EL~~) devices are described by the general formulas I an II (M2 = a divalent metal; M3 = a trivalent metal; X = O, S, NH, or CH2; R1-8 = H or hydrocarbon groups or functional groups; and L1-5 = H or hydrocarbon groups or functional groups). The organometallic complexes may be prepared by mixing organic ligands with metal salts. ~~Electroluminescent~~ devices employing the organometallic materials in the ~~light emission~~ layers are also described. Fabrication of the devices entails sequential formation on a glass substrate of a transparent conductor layer, a hole-transporting layer, an emiting layer comprising the complexes, and a conductive layer.

IT 176045-96-8P
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(organometallic complexes for use in ~~light~~-emitting devices and their preparation and the devices and their fabrication)

RN 176045-96-8 HCAPLUS

CN Aluminum, bis[2-(2-benzoxazolyl-κN3)phenolato-κO]phenoxy- (CA INDEX NAME)



IC ICM C07F005-00
ICS H01L033-00
CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)
Section cross-reference(s): 29
ST light emitting device organometallic complex
IT Electroluminescent devices
(organometallic complexes for use in light-emitting devices and their preparation and the devices and their fabrication)
IT 7439-95-4D, Magnesium, compds. 7440-55-3D, Gallium, compds. 7440-74-6D, Indium, compds. 23467-27-8
RL: DEV (Device component use); USES (Uses)
(organometallic complexes for use in light-emitting devices and their preparation and the devices and their fabrication)
IT 128904-10-9P 176045-96-8P
RL: DEV (Device component use); SPN (Synthetic preparation); PREP (Preparation); USES (Uses)
(organometallic complexes for use in light-emitting devices and their preparation and the devices and their fabrication)
IT 108-95-2, Phenol, reactions 835-64-3, 2-(2-Hydroxyphenyl)benzoxazole 2963-66-8, 2-(2-Hydroxyphenyl)benzimidazole 3411-95-8, 2-(2-Hydroxyphenyl)benzothiazole 7446-70-0, Aluminum chloride, reactions 13510-49-1, Beryllium sulfate
RL: RCT (Reactant); RACT (Reactant or reagent)
(organometallic complexes for use in light-emitting devices and their preparation and the devices and their fabrication)

FULL SEARCH HISTORY

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=> d his nofile

     (FILE 'HOME' ENTERED AT 08:26:59 ON 10 MAR 2009)

     FILE 'HCAPLUS' ENTERED AT 08:27:13 ON 10 MAR 2009
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                E US20070254182/PN
L1            1 SEA SPE=ON  ABB=ON  PLU=ON  US20070254182/PN
                D ALL
                SEL RN

     FILE 'REGISTRY' ENTERED AT 08:28:11 ON 10 MAR 2009
L2            9 SEA SPE=ON  ABB=ON  PLU=ON  (203518-71-2/BI OR
                2085-33-8/BI OR 286383-62-8/BI OR 50926-11-9/BI OR
                555-31-7/BI OR 693794-98-8/BI OR 7429-90-5/BI OR
                7789-24-4/BI OR 835-64-3/BI)
                D SCA
                E "PHENOL, 2-(2-BENZOXAZOLYL)-"/CN
L3            1 SEA SPE=ON  ABB=ON  PLU=ON  "PHENOL, 2-(2-BENZOXAZOLYL)
                -"/CN
                D CN
                D RSD
L4            1 SEA SPE=ON  ABB=ON  PLU=ON  L2 AND 2/AL
                D RSD
                E 12500.71/RID
L5           22 SEA SPE=ON  ABB=ON  PLU=ON  12500.71/RID

     FILE 'STNGUIDE' ENTERED AT 08:37:23 ON 10 MAR 2009

     FILE 'REGISTRY' ENTERED AT 08:39:26 ON 10 MAR 2009
L6            2 SEA SPE=ON  ABB=ON  PLU=ON  L2 AND L5

     FILE 'STNGUIDE' ENTERED AT 08:40:21 ON 10 MAR 2009

     FILE 'HCAPLUS' ENTERED AT 08:41:23 ON 10 MAR 2009
L7           18 SEA SPE=ON  ABB=ON  PLU=ON  L5
L8           11 SEA SPE=ON  ABB=ON  PLU=ON  L6
L9           18 SEA SPE=ON  ABB=ON  PLU=ON  L7 OR L8
                D SCA

     FILE 'STNGUIDE' ENTERED AT 08:42:04 ON 10 MAR 2009

     FILE 'HCAPLUS' ENTERED AT 08:44:18 ON 10 MAR 2009
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L10      1524519 SEA SPE=ON  ABB=ON  PLU=ON  73/SC,SX
L11          17 SEA SPE=ON  ABB=ON  PLU=ON  L9 AND L10
L12           1 SEA SPE=ON  ABB=ON  PLU=ON  L9 NOT L11
L13             QUE SPE=ON  ABB=ON  PLU=ON  ELECTROLUM!N? OR ORGANOLUM!
                N? OR (ELECTRO OR ORGANO OR ORG#)(2A)LUM!N? OR
                LIGHT?(2A)(EMIT? OR EMISSION?) OR EL OR E(W)L OR OLED
                OR L(W)E(W)D OR LED/IT
L14          17 SEA SPE=ON  ABB=ON  PLU=ON  L9 AND L13
L15          18 SEA SPE=ON  ABB=ON  PLU=ON  L11 OR L12 OR L14
                SAV TEMP L15 GAR899HCP/A
                D QUE STAT L15
                D QUE STAT L15
                D L15 1-18 IBIB ED ABS HITSTR HITIND
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